

Specification (clean):

**[0039]** As previously discussed, SA bleeds from the SA-modified reagents during storage leading to decreased assay sensitivity and reliability. In order to solve this problem, biotin was coupled to dyed sensitizer beads. In one example, the biotinylated sensitizer beads were prepared by the following method: uncoated dyed sensitizer bead was activated with EDAC followed by NHS then reacted with biotin LC-PEO amine (+) trioxaundecanediamine (Pierce 21347 lot DH57849) at RT for 72 hours; final bead weight is 20mg/mL; final buffer is 100mM TRIS, 300mM NaCl, 1mM EDTA, 1mg/mL BSA, 0.1% Triton x 405, 0.01% Proclin 300 pH 8.0.